

2. How has education narrow or widen the gap between developing and developed nations?

Education comes in different forms. Latin grammar schools that teach Latin, Philosophy and Literature are a form of education. Vocational education teaching welding and car manufacturing are also a form of education. Informal education on the job also falls under this umbrella term. The short answer is that education has neither narrowed nor widened the gap. Education is only as relevant to the 'gap' as far as the job market opportunities go. As such, a detailed economic analysis on the impacts of training and the economy is more appropriate to understanding the effects.

Both developed and developing nations have a range of jobs that involve different skill ranges. This differentiation is subdivided into necessary skill (i.e. a university degree in greek mythology is unnecessary for a secretarial job involving emailing) and a floating 'bargaining power' skill (i.e. in certain climates, the employer may hire a masters graduate for a bachelors entry role due to bargaining power). The difference between developed and developing nations tends to be the types of industries and the pervasiveness of the industry. Developed economies tend to have less manufacturing, less labor-intensive agricultural industries, more service-oriented economies or more tertiary sectors. The converse is true for developing nations. This, however, is a rough stereotype and many economies fall outside of the stereotype. For instance, most OPEC countries have a higher GDP than western developed economies but the industry (mining and energy) is more atypical of a developing country.

In developed nations, education has had complex effects on the local population. Between the 1870s to the 1920s, Great Britain had enacted a series of legislations that made elementary education mandatory. By 1918, basic education was mandatory throughout the USA.¹ In the late 19th century and early 20th century, there was an initial wave of widespread school enrollment. Only during the narrow window where there was a disparity in the roll out would there have been any relative advantage. The concept of relative advantage is explained in a UC Berkeley article: "... that what matters is the person's relative level of education. When few people have graduated high school, doing so will make a big difference, but when most people have a high school diploma, then real success then requires going to college. Employers just up their requirements as educational attainment spreads".² Thus, the effect of social mobility happened in between 1870-1920s in Great Britain or between 1852 to 1918 in the USA when some had educational attainment and some did not. The irony is that it is inequality that helps a spread in the distribution of 'the pack'. And it is that unequal distribution due to differences in rollout timing that aids some, but not all, towards upwards social mobility. After education became mandatory, the entire pack shifted equally. And as such, any competitive 'relative advantage' eroded. The end result post-1920s is that unless there are sudden increases in jobs higher in the pyramid, education has led to a worsening of returns for most and the only effect is that one who does not have mandatory education falls behind the pack, but having it does not confer any relative advantages in the job market.

¹ Hood, W. R. (1921). State Laws Relating to Education Enacted in 1918 and 1919. Bulletin, 1920, No. 30. In ERIC. Bureau of Education, Department of the Interior. <https://eric.ed.gov/?id=ED543399/>

² June 10, C. F. |, & 2016. (2016, June 10). Does education increase social mobility? What U.S. history reveals. Berkeley News. https://news.berkeley.edu/berkeley_blog/does-education-increase-social-mobility-what-u-s-history-reveals

The oversupply of graduates in developed countries has several effects on the developing world. The disparity has allowed graduates from developed countries to move to the developing countries where there is a shortage of skilled workers. The effect is manifold. There is a presumption that the move to the developing country is done out of necessity. Therefore, the gap between the migrating developed worker and the average developed country worker is actually reduced as the developing country offer is typically better than the local one. The gap between the migrated developed country worker and the developing country median is likely to take on local norms. To the extent they exceed the median, they are perhaps taken to have ‘widened’ the gap in the developing country.

The next effect is an unintentional one. The repeated raising of mandatory school-leaving ages in developed countries, coupled with an outmoded 19th and 20th century presumption that education can ‘get’ them better jobs, created a labor force out of touch with the industrial structure of the economy. To put it simply, assume a developed economy’s industrial breakdown was as follows and that the total positions matched the total demography: 10% professional, 10% technology and research, 30% service, 40% manufacturing and 10% agricultural. In reality, only the top 20% will get the higher paid professional or technological/ research positions. It is the relative *top* 20%, rather than the presence or absence of a degree that determines if they would get the position. However, the entrenched ‘fallacy of equivalence’, whereby some assume that the presence of *any* tertiary education would get them ‘better jobs’ had possibly led to a reluctance to do jobs in service, manufacturing or agriculture. For instance, healthcare vacancies in the UK were at a record high in 2023 amidst an unemployment and/or not economically active number of 10 million in a country of 63 million.³⁴ In the same article, the reasons attributed to the nursing strike were ‘Undervalued. Underpaid. Understaffed.’ The selection is no longer about have or have nots, but the percentile and ‘quality’ such that jobs typically judge qualitatively based on institutional ranking, competence and other factors rather than presence or absence of any degree. Consequently, other subtle forms of discrimination have irrationally occurred due to correlation, but not causation, to percentiles such as online degrees (usually non-competitive), unfunded positions (usually non-competitive in the US) or humanities degrees (usually seen as ‘easier’ or less competitive than hard sciences). The myriad of factors has led to outsourcing of service and manufacturing jobs to countries where there would be willing takers.

The effect of this outsourcing is two-fold. The ‘fallacy of equivalence’ brought about by widespread education pushed these jobs to the developed world. The effect on the lower class in the developed world has been either devastating (in countries with weak benefits systems) and led to various protests against outsourcing or has caused an onerous burden on social services (in countries with generous benefits systems). Trump’s campaign (“Make America Great Again” or “Buy American, Hire American”)

³ Partington, R., & correspondent, R. P. E. (2023, February 13). Healthcare staff shortage main factor in near-record job vacancies. The Guardian. <https://www.theguardian.com/business/2023/feb/13/healthcare-staff-shortages-fuelling-near-record-job-vacancies-across-uk-economy>

⁴ King, B. (2020, May 19). Unemployment: Who are the millions of Britons not working?. BBC News. <https://www.bbc.com/news/business-52660591>

generated significant traction in America due to the cumulative effects over decades of outsourcing.⁵ In the hypothetical figure of: 10% professional, 10% technology and research, 30% service, 40% manufacturing and 10% agricultural, it would be equivalent to saying 10% of service and 20% of manufacturing jobs were outsourced, leading to a gap of 30% of unemployed and an overall fall in bargaining power due to the oversupply of workers in that bracket. Thus, outsourcing has led to an increased gap within the developed country.

However, between the developed and developing country, the gap has decreased due to the unintended ripple effects of mass education. China is a prime example. As a manufacturing economy, the rise of China was predicated on manufacturing for cheap; taking on the work (and pay) of the hypothetical 10% service and 20% manufacturing jobs where either union demands made the margin uncompetitive to consumers (the UK nursing strike) or workers simply do not want to work (as in the abovementioned 9 million economically inactive and not job-seeking statistic). The result is outsourcing that bridged the gap between the developing countries and the developed countries.

And yet, copying the Western style of ‘developing’ and upskilling would simply lead to the gap being widened again. In parallel to Western domestic markets, the ‘better jobs’ are simply not infinite. Just as how moving away from manufacturing or lower skilled jobs led to no jobs for that bracket in developed nations, developing countries who move away from the same competitive advantage will cease to ‘develop’ or narrow the gap. In recent years, Western and Chinese manufacturers have chosen to shift⁶⁷ the source of China’s rise to Vietnam, Malaysia, Indonesia, Taiwan and more. As such, instead, the other developing countries, rather than China, will end up with the same manufacturing contracts that propelled China into its rise and narrow the gap. If countries such as China continue to develop just as Western countries do, the irony is that they will start becoming less competitive just as how many Western countries are and end up with the same slew of problems facing developed countries.

The above is a realistic play-out of the stereotypical notion that education leads to ‘better jobs’ and that it is the disparity of ‘education’ that leads to a gap. It is a stereotype that has little economic credence because it depends on the range of available jobs to begin with. The range of available jobs depends on market demand. The narrowing of the gap occurs through spillover balance of trade (BOT) effects from outsourcing contracts (as in China) or domestic production (such as Brazil selling local agricultural products to USA). Education in developing countries only has an effect in narrowing the gap where it relates to the source of the BOT surplus. For instance, if the outsourcing contract is in clothes manufacturing it is not necessary to be educated in non-technical disciplines such as Cambodian history or Mendellian genetics. However, if it is an outsourcing contract for a call center to a local French

⁵ Schoen, J. W. (2017, April 6). Trump’s “Made in America” slogan doesn’t apply to Ivanka. [Www.cnn.com. https://www.cnn.com/2017/04/06/exclusive-trumps-made-in-america-slogan-doesnt-apply-to-ivanka.html](https://www.cnn.com/2017/04/06/exclusive-trumps-made-in-america-slogan-doesnt-apply-to-ivanka.html)

⁶ LaRocco, L. A. (2022, October 20). China, “factory of the world,” is losing more of its manufacturing and export dominance, latest data shows. [CNBC. https://www.cnn.com/2022/10/20/china-factory-of-the-world-is-losing-its-manufacturing-dominance.html](https://www.cnn.com/2022/10/20/china-factory-of-the-world-is-losing-its-manufacturing-dominance.html)

⁷ Shoulberg, W. (n.d.). Vietnam Is Becoming The Big Winner In The China Trade Wars. *Forbes*. Retrieved March 11, 2023, from <https://www.forbes.com/sites/warrenshoulberg/2019/10/16/us-finally-succeeds-in-vietnam-as-more-companies-move-sourcing-there/?sh=23d473744a4e>

customer service department, then education in the French language may be relevant to fulfilling the contract. Given the oversupply of skilled educated workers in developed nations and better ranked quality candidates in other foreign developed nations, it is unlikely that skilled contracts will be outsourced en masse to the third world as with manufacturing and service jobs that companies had found staffing to be hard. As such, education in developing countries will not narrow or widen the gap in itself. Instead, the gap is dependent on contracts and actual job opportunities, many of which are not typically restricted by tertiary educational attainment.

In summary, education has had complex effects between developed and developing countries. Mass education in developed countries led to a spillover effect whereby holders of tertiary degrees either priced themselves out of the market through strikes or did not want to be economically active in a “percentile-equivalent” but beneath-their-qualifications job. These have an effect of exerting a pressure on companies to outsource to other developing countries. Contractors of such outsourcing thus narrowed the gap by taking on manufacturing and service outsourcing contracts. However, after the outsourced countries’ people are educated themselves and follow the same pattern of not wanting to do manufacturing or service level work, the outsourcing contracts will move to another set of developing countries where the same pattern repeats. Just as how the lower working class from the developing country stagnated, the same will occur in the first outsourced country. The same applies to other outsourced countries who want to move away from their source of BOT receipts. There are minimal direct effects of the lack of general education in developing countries unless it impedes the ability to fulfil such outsourcing contracts or direct sale contracts.